



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/511,798

10/19/2004

Dirk Jeroen Breebaart

NL 020639

4804

24737

7590

11/12/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

PAUL, DISLER

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

11/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,798	Applicant(s) BREEBAART, DIRK JEROEN	
	Examiner DISLER PAUL	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101 because, the "process" claims fail to tie with another statutory class (such as a particular apparatus) or transform underlying subject matter such as (article or materials) to a different state or thing and thus, claims 1-7 are directed to non-statutory subject matter.

Claims 9- 10 are rejected under 35 U.S.C. 101 because they pertain to non-statutory subject matters.

"Data structures **not claimed** as embodied in computer-readable media are descriptive material per se and **are not statutory** because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (Claim to a data structure per se held nonstatutory.). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." See Interim Guidelines on 35 USC 101, Annex IV (a): Functional Descriptive Material.

Claim 9 recites signal per se which is non-statutory subject matter.

Claim 10 recites a medium with a signal stored on and is considered non-functional descriptive material which is non-statutory.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Irwan et al. (US 2002/0037086 B1).

RE claim 1, Irwan et al. disclose of the method of synthesizing a first and a second output signal from an input signal, the method comprising: inherently filtering the input signal to generate a filtered signal (fig.2 wt(4,7); par[0026,0019]/value found by cross correlation and localization and thus filter to be used)); and the correlation parameter indicative of a desired correlation between the first and second output signals; obtaining a level parameter indicative of a desired level difference between the first and second output signals (par [0026-0029; 0020,0022]); and transforming the input signal and the filtered signal by a matrixing operation into the first and second output signals, where the matrixing operation depends on

Art Unit: 2615

the correlation parameter and the level parameter (fig.1,4,2 wt (5,2); par [0019,0028; 0022]).

Re claim 2, the method according to claim 1, wherein the matrixing operation comprises a common rotation by a predetermined angle of the first and second output signals in a space spanned by the input signal and the filtered input signal; and where the predetermined angle depends on the level parameter (fig.1; par [0009; 0019; 0028; 0022; 0027]/matrix depend on the input and angles for determining signals contribution).

Re claim 7, the arrangement for synthesizing a first and a second output signal from an input signal, the arrangement comprising: filter means for filtering the input signal to generate a filtered signal; means for obtaining a correlation parameter indicative of a desired correlation between the first and second output signals; means for obtaining a level parameter indicative of a desired level difference between the first and second output signals; means for transforming the input signal and the filtered signal by a matrixing operation into the first and second output signals, where the matrixing operation depends on the correlation parameter and the level parameter (see claim 1 rejection).

Re claim 3, the method according to claim 2, but, wherein the predetermined angle is selected to inherently maximize a total contribution of the input signal to the first and second output signals (fig.1; par [0023,0025]/degree to affect to output level signal).

Re claim 4, the method according to claim 1, wherein further comprising scaling each of the first and second output signals to said desired level difference between the first and second output signals (par [0027-0028]).

Re claim 8, the apparatus for supplying an inherent decoded audio signal (fig.2 wt (5)/signal to in such format), the apparatus comprising an input unit for receiving an inherent encoded audio signal (fig.2 wt (4)); the inherent decoder for decoding the encoded audio signal, the decoder comprising an arrangement for synthesizing a first and a second audio signal according to claim 7 and an output unit for providing the decoded first and second audio signal (fig.2 wt (5));.

Re claim 9, the decoded multi-channel signal comprising a first and a second signal component synthesized from an input signal by transforming the input signal and a filtered signal by a matrixing operation into the first and second signal components, where the filtered signal is generated by filtering the input signal, and where the matrixing operation depends on a correlation parameter indicative of a desired correlation between the first and second output signals and on a level parameter indicative of a desired level difference between the first and second output signals (see claim 1 rejection).

4. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irwan et al. (US 2002/0037086 B1) and Ali (US 6,895,093 B1).

Re claim 5, the method according to claim 1 with input signal being filtered (fig.2 wt (3)), But, Irwan et al. fail to disclose of the wherein the filtering of the input signal comprises all-pass filtering. But, Ali disclose of a sytem wherein similar concept of filtering with the filter being of the all-pass filtering (fig.3; col.1 line 65-col.6 line 5) for purpose of obtaining good signal decorrelation. Thus, taking the combined teaching of Irwan et al. and Ali as a whole, it would

Art Unit: 2615

have been obvious for one of the ordinary skill in the art to have modified Irwan with the filtering of the input signal comprises all-pass filtering for purpose of obtaining good signal decorrelation.

Re claim 6, the method according to claim 5, wherein the all-pass filter comprises a frequency-dependant delay (see claim 5 above).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Irwan et al. (US 2002/0037086 B1).

Re claim 10, Irwan et al. fail to specifically disclose of the storage medium having stored thereon a decoded multi-channel signal according to claim 9. But, official notice is taken the concept of having the storage medium having stored thereon a decoded multi-channel is well known in the art, thus it would have been obvious for one of the ordinary skill in the art to have modified Irwan et al. with the storage medium having stored thereon a decoded multi-channel for generating enhanced surround audio sound.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./
Examiner, Art Unit 2614

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614